

## Ultra Safety Plus XL Safety Syringe (2/05)

**Question:** Has DIS evaluated the Ultra Safety Plus XL Safety Syringe? What are the advantages and disadvantages of this safety syringe?

**Answer:** DIS recently completed a clinical-user evaluation of Septodont's Ultra Safety Plus XL Safety Syringe. The sterile disposable protective sheath is fitted with a dental needle and it accepts standard anesthetic carpules. The reusable plunger assembly is autoclavable. The instructions include an illustrated step-by-step instruction sheet and an instructional CD. The Ultra Safety Plus XL Safety Syringe offers protection from the needle because the needle is protected before the injection and can be easily re-sheathed after the injection. Also, the needle does not have to be removed prior to disposal of the protective sheath eliminating exposure of the worker to unnecessary risk. Evaluators found the Ultra Safety Plus XL easy to assemble and reported that the safety feature was easy to recognize and use. Most evaluators reported that the device functioned as intended and was reliable during the evaluation period. There were no reported percutaneous injuries during the evaluation period. However, evaluators

found it difficult and more time consuming to change anesthetic carpules compared to a conventional syringe. Fifty percent of 10 evaluators experienced difficulty visualizing aspiration of blood into the anesthetic cartridge. When asked to comment on the overall safety of the device, the results were equivocal with five agreeing that the device was safe, three disagreeing, and two



remaining neutral. When asked if the device was safer than using a conventional needle recapped using one hand, four agreed with the statement, four disagreed, one was neutral, and one did not reply. Evaluating safety devices is challenging and several factors can impact the outcome of the product evaluation. With the introduction of any new device or technique, a period of adjustment and relearning of technique is necessary. The short duration of this clinical evaluation; staff experience and preference for conventional devices; and perceived needs for devices with safety features are factors that can affect safety device evaluation. It's also important to consider that when presented with a device that has a significantly different design than a traditional device, decisions regarding preference and future use can be dependent upon the individual practitioner's style and technique. All of these factors can affect the evaluation of safety devices and could account for the variety of opinions obtained during this evaluation. This illustrates the importance of having staff members responsible for patient care involved in the identification and selection process when considering and evaluating new safety devices.

[Click here for additional information.](#)

<b>Manufacturer</b>	Septodont, Inc. 245 Quigley Blvd New Castle, DE 19720-4105 (800) 872-8305 (302) 328-5653 FAX <a href="http://www.septodontinc.com">www.septodontinc.com</a>
<b>Suggested Retail Price</b>	\$27.99 100 disposable, siliconized, triple beveled injectors <sup>1</sup> ; 5 replacement silicone tips for the reusable handle; and 1 autoclavable handle  \$11.29 Additional autoclavable handle
<b>Government Price</b>	\$23.79 100 disposable, siliconized, triple beveled injectors <sup>1</sup> ; 5 replacement silicone tips for the reusable handle; and 1 autoclavable handle  \$9.60 Additional autoclavable handle
<b>Advantages<sup>2</sup></b>	+ Potential to decrease percutaneous injuries compared to conventional syringe system + Provides an engineering control making incorrect needle recapping less likely + Safe and easy breakdown and insertion into sharps container + Adaptable to any hand size + Protective sheath fitted with siliconized, triple beveled needles + Disposable and lightweight
<b>Disadvantages<sup>2</sup></b>	- Time consuming to change anesthetic carpules - May be difficult to see aspirated blood through the protective sheath - Lightweight plastic construction may make the device feel unstable - Produces an increased volume of sharps waste - Requires a certain period of accommodation by the user - More expensive than a conventional syringe system

<sup>1</sup>Five needle sizes are available

<sup>2</sup>Information compiled from limited DIS clinical evaluations.